

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A drug dispenser to be positioned downstream of a drug feeder, the drug dispenser being adapted to receive solid drugs from the drug feeder, to temporarily accumulate the drugs, and to discharge the accumulated drugs, the drug dispenser comprising:

a receptacle having ~~an inner peripheral surface~~, an open top and a bottom adapted to be opened and closed, said receptacle including an outer receptacle portion and an inner receptacle portion,

wherein said inner ~~receptacle portion peripheral surface~~ includes a first movable wall, ~~wall and~~ a second movable wall, and a peripheral wall connecting said first movable wall and said second movable wall, each of said first movable wall, said peripheral wall, and said second movable wall being adapted to move when the bottom of said receptacle is opened, ~~and~~

wherein said first movable wall opposes said second movable wall,

wherein ~~said receptacle comprises an outer receptacle portion and an inner receptacle portion~~, said inner receptacle portion is being rotatably disposed in said outer receptacle portion such that a cavity is formed in said receptacle for accumulating drugs therein, ~~and~~

wherein ~~said inner receptacle portion includes said first movable wall and said second movable wall~~.

wherein said outer receptacle portion includes an arcuate surface, a first opening formed in said arcuate surface at a top of said outer receptacle portion, and a second opening formed in said arcuate surface at a bottom of said outer receptacle portion,

wherein said outer receptacle portion has an expanded portion extending below said second opening, said expanded portion forming a skirt-like portion which expands in a direction

extending away from said second opening for preventing tablets or capsules from sticking in said receptacle,

wherein said inner receptacle portion has an opening formed in said peripheral wall, said opening extending from said first movable wall to said second movable wall, and

wherein the central angle defined by the edges of the opening in said peripheral wall of said inner receptacle portion is greater than the central angle defined by the edges of said first opening of said outer receptacle portion.

2. (Previously Presented) The drug dispenser as defined in claim 15,

wherein the receptacle has a substantially rectangular inner shape with longer sides and shorter sides as seen in a plan sectional view,

the inner peripheral surface comprising a plurality of faces,

at least one of the faces that form the longer sides being the closing member.

3. (Previously Presented) The drug dispenser as defined in claim 1,

wherein each of said first movable wall and said second movable wall is adapted to rotate and has an arcuate portion.

4. (Previously Presented) The drug dispenser as defined in claim 1,

wherein the first movable wall and second movable wall are provided around a position where the drugs are expected to be accumulated.

5. (Previously Presented) The drug dispenser as defined in claim 1,

wherein the outer receptacle portion includes an opening at each of a top and a bottom thereof, and

wherein the inner receptacle portion includes an opening at one end thereof and a closure at the other end opposite to the one end, the inner receptacle portion being invertible within the outer receptacle portion.

6. (Previously Presented) The drug dispenser as defined in claim 1,

wherein the outer receptacle portion includes an arcuate portion at the inner surface thereof and includes an opening at each of a top and a bottom thereof, and

wherein the inner receptacle portion has an outer surface in substantially conformity with the arcuate portion of the inner surface of the outer receptacle portion, the outer surface of the inner receptacle portion having an opening formed at a part thereof, and

wherein the inner receptacle portion is rotatable within the outer receptacle portion such that the outer surface of the inner receptacle portion closes the opening at the bottom of the outer receptacle portion when the inner receptacle portion is at a predetermined angular position and such that the opening of the inner receptacle portion is in conformity with the opening of the outer receptacle portion when the inner receptacle portion is at another predetermined angular position.

7. (Previously Presented) The drug dispenser as defined in claim 1,

wherein the outer receptacle portion includes an arcuate portion at the inner surface thereof and includes an opening at each of a top and a bottom thereof,

wherein the inner receptacle portion has an outer surface in substantial conformity with the arcuate inner surface of the outer receptacle portion, the outer surface of the inner receptacle portion having an opening formed at a part thereof, and

wherein the inner receptacle portion is rotatable within the outer receptacle portion such that the inner receptacle portion is adapted to make at least one and a half rotations in discharging the drugs.

8. (Previously Presented) A drug dispenser to be positioned downstream of a drug feeder, the drug dispenser being adapted to receive solid drugs from the drug feeder, to temporarily accumulate the drugs, and to discharge the accumulated drugs, the drug dispenser comprising:

a receptacle having an inner peripheral surface, an open top and a bottom adapted to be opened and closed, a casing accommodating the receptacle;

an engaging portion normally protruding from and capable of being retracted into the casing; and

a pressing portion for retracting the engaging portion into the casing such that the engaging portion is retracted into the casing when the pressing portion is pressed,

wherein at least part of the inner peripheral surface of the receptacle is formed by a movable wall adapted to move when the bottom of the receptacle is opened.

9. (Original) A drug filling apparatus comprising:

a drug supplying section provided with a plurality of drug feeders adapted to send out solid drugs;

the drug dispenser as defined in claim 1 adapted to temporarily accumulate the drugs sent out from the drug feeder and to discharge the accumulated drugs; and
a drug filling section adapted to fill the drugs discharged from the drug dispenser into a predetermined container or wrapping material.

10. (Original) A drug filling apparatus comprising:

a plurality of drug feeders vertically and horizontally arranged in a matrix;
a plurality of common passageways each corresponding to at least one column of the drug feeders;
the drug dispenser as defined in claim 1 positioned downstream of each of the common passageways; and
a drug filling section adapted to fill the drugs discharged from the drug dispenser.

11. (Previously Presented) A drug dispenser to be positioned downstream of a drug feeder, the drug dispenser being adapted to receive solid drugs from the drug feeder, to temporarily accumulate the drugs, and to discharge the accumulated drugs, the drug dispenser comprising:

a receptacle having an opening at each of a top and a bottom thereof;
a closing member for opening and closing the opening at the bottom of the receptacle;
a scraper adapted to scrape a part of an inner surface of the receptacle or a vicinity of the part when the closing member opens the opening at the bottom of the receptacle;
a casing accommodating the receptacle;
an engaging portion normally protruding from and capable of being retracted into the casing; and

a pressing portion for retracting the engaging portion into the casing such that the engaging portion is retracted into the casing when the pressing portion is pressed;

wherein said scraper and said closing member are discrete structures, said scraper extending away from said closing member.

12. (Previously Presented) The drug dispenser as defined in claim 11,

wherein the receptacle comprises an outer receptacle portion and an inner receptacle portion accommodated in the outer receptacle portion,

wherein the outer receptacle portion includes an opening at each of a top and a bottom thereof, and

wherein the inner receptacle portion has an opening at one end thereof and is closed at the other end opposite to the opening, the inner receptacle portion including the closing member for opening and closing the opening at the bottom thereof, and including the scraper, the scraper being adapted to scrape the inner surface of the outer receptacle portion in accordance with rotation of the inner receptacle portion.

13. (Previously Presented) The drug dispenser as defined in claim 11,

wherein the scraper has a non-circular shape and is adapted to rotate along the inner surface of the outer receptacle portion.

14. (Previously Presented) The drug dispenser as defined in claim 11,

wherein the receptacle comprises an outer receptacle portion and an inner receptacle portion accommodated in the outer receptacle portion,

wherein the outer receptacle portion includes an opening at each of a top and a bottom thereof, and

wherein the inner receptacle portion is rotatable within the outer receptacle portion and has an opening at one end thereof and is closed at the other end opposite to the opening, the inner receptacle portion including the closing member for opening and closing the opening at the bottom of the outer receptacle portion, and including the scraper, the scraper having an arm shape and being rotatable along the inner surface of the outer receptacle portion.

15. (Previously Presented) A drug dispenser to be positioned downstream of a drug feeder, the drug dispenser being adapted to receive solid drugs from the drug feeder, to temporarily accumulate the drugs, and to discharge the accumulated drugs, the drug dispenser comprising:

a receptacle having an opening at each of a top and a bottom thereof;

a closing member for opening and closing the opening at the bottom of the receptacle;

and

a scraper adapted to scrape a part of an inner surface of the receptacle or a vicinity of the part when the closing member opens the opening at the bottom of the receptacle,

wherein the closing member is a linearly movable shutter, and wherein the scraper is integrated with the closing member.

16. (Cancelled)

17. (Original) A drug filling apparatus comprising:

a drug supplying section provided with a plurality of drug feeders that are adapted to send out solid drugs;

the drug dispenser as defined in claim 11 adapted to temporarily accumulate the drugs sent out from the drug feeder and to discharge the accumulated drugs; and

a drug filling section adapted to fill the drugs discharged from the drug dispenser into a predetermined container or wrapping material.

18. (Original) A drug filling apparatus comprising:

a plurality of drug feeders vertically and horizontally arranged in a matrix;

a plurality of common passageways each corresponding to at least one column of the drug feeders;

the drug dispenser as defined in claim 11 positioned downstream of each of the common passageways; and

a drug filling section adapted to fill the drugs discharged from the drug dispenser.

19. (Previously Presented) A drug dispenser to be positioned downstream of a drug feeder, the drug dispenser being adapted to receive solid drugs from the drug feeder, to temporarily accumulate the drugs, and to discharge the accumulated drugs, the drug dispenser comprising:

a receptacle having an opening at either of its top and bottom;

a closing member for opening and closing the opening at the bottom of the receptacle;

and

a scraper adapted to cross within the receptacle when the closing member opens the opening at the bottom of the receptacle,

wherein the closing member is a linearly movable shutter and wherein the scraper is integrated with the closing member.

20. (Cancelled)

21. (Previously Presented) The drug dispenser as defined in claim 19,

the scraper having a sloping side so as to cross within the receptacle with the sloping side facing forward in accordance with a linear movement of the closing member.

22. (Previously Presented) The drug dispenser as defined in claim 19, further comprising:

a casing accommodating the receptacle;

an engaging portion normally protruding from and capable of being retracted into the casing; and

a pressing portion for retracting the engaging portion into the casing such that the engaging portion is retracted into the casing when the pressing portion is pressed.

23. (Original) A drug filling apparatus comprising:

a drug supplying section provided with a plurality of drug feeders that are adapted to send out solid drugs;

the drug dispenser as defined in claim 19 adapted to temporarily accumulate the drugs sent out from the drug feeder and to discharge the accumulated drugs; and

a drug filling section adapted to fill the drugs discharged from the drug dispenser into a predetermined container or wrapping material.

24. (Previously Presented) A drug filling apparatus comprising:

a main body;

a plurality of drug feeders adapted to send out solid drugs and arranged vertically and horizontally in a matrix in the main body;

a plurality of common passageways each corresponding to at least one column of the drug feeders;

a drug dispenser positioned downstream of each of the common passageways, the drug dispenser being adapted to receive solid drugs from the drug feeder, to temporarily accumulate the drugs, and to discharge the accumulated drugs through its predetermined opening; and

a drug filling section adapted to fill the drugs discharged from the drug dispenser into a predetermined container or wrapping material,

wherein the drug dispenser comprises a receptacle, a power source and a casing accommodating the receptacle and the power source integrally, the receptacle being adapted to accumulate the drugs, the power source being adapted to open an opening of the receptacle,

wherein the drug dispenser further comprises an engaging portion normally protruding from and capable of being retracted into the casing, and a pressing portion for retracting the engaging portion into the casing such that the engaging portion is retracted into the casing when the pressing portion is pressed, and

wherein the main body has a plurality of compartments for installing the casing of the drug dispenser therein, each compartment having an engaging hole or a slot for engaging the engaging portion of the drug dispenser, the drug dispenser being insertable into the compartment with the pressing portion of the drug dispenser pressed to make the engaging

portion retracted into the casing, the engaging portion being engaged with the engaging hole or the slot formed in the compartment when the drug dispenser is inserted into the compartment.

25. (Previously Presented) The drug filling apparatus as defined in claim 24,

wherein the casing has a casing connector at its distal end and the main body has a main body connector in the compartment thereof, and

wherein the engagement hole or the slot extends in a longitudinal direction of the casing such that the casing connector and the main body connector are connected by sliding the casing with the engaging portion engaged with the engaging hole or the slot in the compartment.

26-29. (Cancelled)

30. (Currently Amended) The drug dispenser as defined in claim 1, wherein said first movable wall is concentric with said second movable wall, wall, and

~~wherein a peripheral wall connects said first movable wall and said second movable wall.~~

31. (Currently Amended) The drug dispenser as defined in claim 1,

wherein a cross section of said inner receptacle portion is a partial circle, the peripheral wall is arcuate and constitutes the circumference of the partial circle, and the central angle of the inner receptacle portion is formed between a center of the partial circle and the edges of the opening in the peripheral wall, and said inner receptacle portion includes a peripheral wall connecting said first movable wall and said second movable wall.

wherein a cross section of the arcuate surface of the outer receptacle portion is a partial circle, and the central angle of the outer receptacle portion is formed between a center of the partial circle of the arcuate surface and the edges of the first opening of the outer receptacle portion.

32-33. (Cancelled)

34. (Previously Presented) The drug dispenser of claim 11, wherein said scraper and said closing member are rotatable about an axis of rotation, and wherein said scraper extends away from said closing member in a direction perpendicular to the axis of rotation of rotation.